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EXAMINER				
DEAN, RAYMOND S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/030,798

Applicant(s)

SALONAHO ET AL.

Examiner

RAYMOND S. DEAN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-24, 29-37, 54, 64, 76, 89, 102, 117, 133, 150 and 163-178 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-24, 29-37, 54, 64, 76, 89, 102, 117, 133, 150 and 163-178 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 30, 2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 3, 7 – 22, 29, 33, 54, 64, 76, 89, 102, 117, 133, 150, 163 – 178 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charbonnier (5,241,686) in view of D'Amico et al. (5,127,100) and in further view of Barnett et al. (5,509,051)

Regarding Claims 1, 29, Charbonnier teaches a method for selecting a new cell for a station in a cellular telecommunication system, said station being associated with a current cell, said method comprising the steps of: measuring at the station the strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); measuring at the station the strength of a communication from at least one other cell (Column 8 lines 41 – 57); decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); modifying the measured strength of the communication from the at least one other cell by at least one further offset value in dependence on the obtained offset information (Column 8 lines 41 – 57, See Response To Arguments set forth in the Office Action dated December 30, 2008); comparing the measured strength of the communication from the current cell and the measured strength of the communication from the at least one other cell after the step of modifying (Column 8 lines 41 – 57).

Charbonnier does not teach modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on the offset information; measuring a duration of time for which the measured strength of the communication from at least one other cell exceeds the

measured strength of the communication from the current cell during said step of comparing and changing the current cell which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period.

D'Amico teaches measuring a duration of time for which the measured signal strength of the communication from a cell exceeds the measured strength of the communication from the another cell (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached), changing the current cell with which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handoff method of D'Amico in the system of Charbonnier as an alternative means for achieving the predictable result of handoff.

Barnett, which also teaches a wireless system that conducts handoff, teaches modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on offset information (Col. 6 lines 10 – 21, hysteresis value is the offset value, the offset information is hysteresis information).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Charbonnier in view of D'Amico with the above feature of Barnett for the purpose of preventing the ping pong effect as taught by Barnett.

Regarding Claim 2, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a value is added to the measured strength of the communication from the at least one other cell (Column 8 lines 41 – 45).

Regarding Claim 3, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a function is applied to the measured strength of the communication from the at least one other cell (Column 8 lines 41 – 45).

Regarding Claims 7, 33, 34, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1, 2, 3. Charbonnier further teaches wherein the offset information as to how the measured strength of a communication from a neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claim 8, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 7. Charbonnier further teaches wherein the station is provided with timing information defining when the station should next check for the offset information (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying

information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station to read said modifying information, since the broadcasting is done on a continuous or periodic basis the mobile station will check for said broadcast information on a continuous or periodic basis, the mobile station will therefore be provided with timing information enabling said mobile station to periodically read said modifying information).

Regarding Claim 9, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 8. Charbonnier further teaches wherein the timing information is in the communication from the neighboring cell (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station that it is time to read said modifying information, the cue is therefore the timing information).

Regarding Claim 11, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches wherein information defining the period of time is in the communication from the current cell (Column 8 lines 46 – 57, in order for another cell to be selected the value of the corrected field of said cell must be higher than the corrected field of the current cell for a predetermined period of time, said predetermined period of time will be obtained from the scanning of the beacon routes).

Regarding Claims 12, 54, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 9, and 11, 164. Barnett further teaches wherein the offset value is added to the measured strength of the communication from the current cell prior to said step of comparing (Col. 6 lines 10 – 21, hysteresis value is added prior to the comparison that determines whether or not a handoff should occur).

Regarding Claim 13, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 12. Barnett further teaches wherein if the current cell is changed in said step of changing from an old current cell to a new current cell, the offset value is no longer added to the measured strength of the communication from the old current cell and a new offset value is added to the measured strength of the communication from the new current cell (Col. 6 lines 10 – 21, the hysteresis value is added to the signal strength of the new serving cell).

Regarding Claim 14, 64 Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 13. Charbonnier further teaches wherein the communication from the at least one of the current cell and the at least one other cell comprises the broadcast control channel (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel).

Regarding Claims 15, 76, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein the station has at least one common channel in

the current cell (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 16, 89, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein the station has at least one dedicated channel in the current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 17, 102 Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 16. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 18, 117 Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 17. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 19, 133, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 18. Charbonnier further teaches wherein the telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 20, 150, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 19.

Charbonnier further teaches wherein the telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

Regarding Claims 21, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claims 19, 20. Charbonnier further teaches wherein the telecommunication system is code division/time division multiple access hybrid (Column 4 lines 11 – 13, cellular radio communication networks comprise hybrid CDMA/TDMA networks).

Regarding Claim 22, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); means for measuring the received strength of a communication from at least one other cell (Column 8 lines 41 – 57); means for decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); further modifying the measured strength of the communication from the at least one other cell by a further offset value in dependence on the obtained offset information; (Column 8 lines 41 – 57, See also Response To Arguments set forth in the Office Action dated December 30, 2008); means for

comparing the measured strength of the communication from the at least one other cell, and the measured received strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57).

Charbonnier does not teach means for modifying the measured strength of a communication from the current cell by a current cell offset value, the current cell offset value being dependent on the offset information; means for measuring a duration of time for which the measured strength of the communication from at least one other cell exceeds the measured strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying; and means for changing, the current cell which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period.

D'Amico teaches means for measuring a duration of time for which the measured signal strength of the communication from a cell exceeds the measured strength of the communication from another current cell (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached), means for changing, the current cell with which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period (Col. 4 lines 18 – 25, there must be a higher signal strength

from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handoff method of D'Amico in the system of Charbonnier as an alternative means for achieving the predictable result of handoff.

Barnett, which also teaches a wireless system that conducts handoff, teaches modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on offset information (Col. 6 lines 10 – 21, hysteresis value is the offset value, the offset information is hysteresis information).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Charbonnier in view of D'Amico with the above feature of Barnett for the purpose of preventing the ping pong effect as taught by Barnett.

Regarding Claim 163, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); means for measuring the received strength of a communication from at least one other cell (Column 8 lines 41 – 57); means for decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is

the field correction parameter); further modifying the measured strength of the communication from the at least one other cell by a further offset value in dependence on the obtained offset information (Column 8 lines 41 – 57, See also Response To Arguments set forth in the Office Action dated December 30, 2008); means for comparing the measured strength of the communication from the at least one other cell, and the measured received strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57); and a network element for sending communications to the station, said network element being arranged to send offset information to the station (Column 9 lines 16 – 17, the relay is a network element), the offset information being used by the station to modify measurements of the strength of communications from at least one other cell (Column 2 lines 26 – 47, Column 8 lines 41 – 57).

Charbonnier does not teach means for modifying the measured strength of a communication from the current cell by a current cell offset value, the current cell offset value being dependent on the offset information; means for measuring a duration of time for which the measured strength of the communication from at least one other cell exceeds the measured strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying; and means for changing, the current cell which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period.

D'Amico teaches means for measuring a duration of time for which the measured signal strength of the communication from a cell exceeds the measured strength of the communication from another cell (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached), means for changing, the current cell with which the station is associated, wherein the current cell is changed only if the measured duration of time is at least a predetermined time period (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handoff method of D'Amico in the system of Charbonnier as an alternative means for achieving the predictable result of handoff.

Barnett, which also teaches a wireless system that conducts handoff, teaches modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on offset information (Col. 6 lines 10 – 21, hysteresis value is the offset value, the offset information is hysteresis information).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Charbonnier in view of D'Amico with the above feature of Barnett for the purpose of preventing the ping pong effect as taught by Barnett.

Regarding Claim 164, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claim 163. Charbonnier further teaches wherein the step of decoding a communication is dependent upon the measured strength of the communication satisfying a predetermined condition (Column 2 lines 26 – 47, Column 9 lines 16 – 17, in order for the field correction parameter to be properly received the signal strength must meet a minimum received signal strength threshold).

Regarding Claims 167, 169, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claims 1, 29. D'Amico further teaches detecting, at a first time during a step of comparing, when the measured strength of the cell exceeds the measured strength of the another cell (Col. 4 lines 18 – 25), wherein said step of measuring comprises measuring a duration of time starting at the first time for which the measured strength of the communication from the cell exceeds the measured strength of the communication from the another cell (Col. 4 lines 18 – 25), and wherein said step of changing comprises changing the current cell with which the station is associated only if the measured duration of time reaches a second time, the first time and second time defining the predetermined time period (Col. 4 lines 18 – 25).

Regarding Claim 168, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claim 22. D'Amico further teaches means for detecting, at a first time, when the measured strength of the cell exceeds the measured strength of the another cell (Col. 4 lines 18 – 25), wherein said means for measuring comprises means for measuring a duration of time starting at the first time for which the measured strength of the communication the cell exceeds the measured strength of the

communication from the another cell (Col. 4 lines 18 – 25), and wherein said means for changing comprises means for changing the current cell with which the station is associated only if the measured duration of time reaches a second time, the first time and second time defining the predetermined time period (Col. 4 lines 18 – 25).

Regarding Claims 170, 172, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claims 1, 29. D'Amico further teaches wherein during the step of changing, the current cell is not changed when the measured strength of the communication from a cell does not exceed the measured strength of the communication from another cell for the duration of the predetermined time period (Col. 4 lines 18 – 25).

Regarding Claim 171, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claim 22. D'Amico further teaches wherein said means for changing does not change the current cell when the measured strength of the communication from a cell does not exceed the measured strength of the communication from another cell for the duration of the predetermined time period (Col. 4 lines 18 – 25).

Regarding Claims 173, 175, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claims 1, 29. D'Amico further teaches wherein said steps of measuring at the station the strength of a communication from the cell and measuring at the station the strength of a communication from another cell are performed simultaneously (Col. 4 lines 18 – 25, in order for the signal strengths to be compared there will need to be simultaneous measurement of said signal strengths).

Regarding Claim 174, Charbonnier in view of D'Amico teaches all of the claimed limitations recited in Claim 22. D'Amico further teaches wherein said means for measuring the received strength of a communication from the cell measures the received strength of a communication from the cell at the same time that means for measuring the received strength of a communication from another cell measures the received strength of a communication from that another cell (Col. 4 lines 18 – 25, in order for the signal strengths to be compared there will need to be simultaneous measurement of said signal strengths).

Regarding Claims 176, 178, Charbonnier teaches a method for selecting a new cell/changing at least one current cell for a station in a cellular telecommunication system, said station being associated with a current cell, said method comprising the steps of: measuring at the station the strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); measuring at the station the strength of a communication from at least one other cell (Column 8 lines 41 – 57); decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); further modifying the measured strength of the communication from the at least one other cell by a further offset value in dependence on the obtained offset information; (Column 8 lines 41 – 57, See also Response To Arguments set forth in the Office Action dated December 30, 2008); comparing the measured strength of the communication from the current cell and the measured strength of the communication

from the at least one other cell after the step of modifying (Column 8 lines 41 – 57); and depending on the results of said step of comparing, changing the current cell with which the station is associated, wherein the current cell is changed only if the condition that the measured strength of the communication from the at least one other cell exceeds the measured strength of the communication from the current cell is met (Column 8 lines 41 – 57).

Charbonnier does not teach means for modifying the measured strength of a communication from the current cell by a current cell offset value, the current cell offset value being dependent on the offset information; wherein the current cell is changed if the condition continues to be met for the duration of a predetermined period of time.

D'Amico teaches wherein the current cell is changed if the condition continues to be met for the duration of a predetermined period of time (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handoff method of D'Amico in the system of Charbonnier as an alternative means for achieving the predictable result of handoff.

Barnett, which also teaches a wireless system that conducts handoff, teaches modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on offset

information (Col. 6 lines 10 – 21, hysteresis value is the offset value, the offset information is hysteresis information).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Charbonnier in view of D'Amico with the above feature of Barnett for the purpose of preventing the ping pong effect as taught by Barnett.

Regarding Claim 177, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); means for measuring the received strength of a communication from at least one other cell (Column 8 lines 41 – 57); means for decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); further modifying the measured strength of the communication from the at least one other cell by a further offset value in dependence on the obtained offset information (Column 8 lines 41 – 57, See also Response To Arguments set forth in the Office Action dated December 30, 2008); means for comparing the measured strength of the communication from the at least one other cell, and the measured received strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57); and means for changing, depending on the results of the

comparison performed by the comparing means, the current cell with which the station is associated, wherein the current cell is changed only if the condition that the measured strength of the communication for the at least one other cell exceeds the measured strength of the communication from the current cell is met (Column 8 lines 41 – 57).

Charbonnier does not teach means for modifying the measured strength of a communication from the current cell by a current cell offset value, the current cell offset value being dependent on the offset information; wherein the current cell is changed if the condition continues to be met for the duration of a predetermined period of time.

D'Amico teaches wherein the current cell is changed if the condition continues to be met for the duration of a predetermined period of time (Col. 4 lines 18 – 25, there must be a higher signal strength from the other cell for a particular period of time thus there is a measurement of a time period in order to determine if said particular period of time is reached).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handoff method of D'Amico in the system of Charbonnier as an alternative means for achieving the predictable result of handoff.

Barnett, which also teaches a wireless system that conducts handoff, teaches modifying the measured strength of the communication from the current cell by a current cell offset value, the current cell offset value being dependent on offset information (Col. 6 lines 10 – 21, hysteresis value is the offset value, the offset information is hysteresis information).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Charbonnier in view of D'Amico with the above feature of Barnett for the purpose of preventing the ping pong effect as taught by Barnett.

5. Claims 4 – 6, 23 – 24, 31 – 32, 35 - 37, 70 – 72, 83 – 85, 96 – 98, 111 – 113, 127 – 129, 144 – 146 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charbonnier (5,241,686) in view of D'Amico et al. (5,127,100) in view of Barnett et al. (5,509,051) and in further view of Karlsson (5,640,677).

Regarding Claim 4, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 164. Charbonnier in view of D'Amico and in further view of Barnett does not teach wherein the predetermined condition is that the measured strength of the communication from the at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the measured strength of the communication from the at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier in view of D'Amico and in further view of Barnett as an alternative means for selecting the best server cell for the mobile station thereby

enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 5, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claim 4. Karlsson further teaches wherein the threshold is defined relative to the measured strength of the communication from the current cell (Column 11 lines 25 – 28, in order for the neighbor cell to be selected the threshold must be higher than the strength of the communication from the current cell thus said threshold will be defined relative to the strength of the communication from the current cell).

Regarding Claim 6, 32, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4, 6. Karlsson further teaches wherein information defining the threshold is included in the communication from the current cell (Column 10 lines 3 – 8, Column 10 lines 63 – 67, Column 11 lines 1 – 3, Column 11 lines 10 – 11).

Regarding Claim 23, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 22. Charbonnier in view of D'Amico and in further view of Barnett does not teach said at least one other station requiring a different procedure in order to determine if a new current cell is required.

Karlsson teaches at least one other station requiring a different procedure in order to determine if a new current cell is required (Column 11 lines 25 – 28, the procedure is based on the threshold for the neighbor cell).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the different procedure taught above by Karlsson in the wireless system of Charbonnier in view of D'Amico as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 24, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claim 23. Charbonnier teaches wherein the signaling sent by said network to said at least one station and to said at least one other station is dependent on the procedure required by the respective stations to determine if a new current cell is required (Column 6 lines 59 – 68, the correction parameters are broadcasted because the procedure for selecting a new current cell depends on said correction parameters unlike the threshold procedure of Karlsson as described above, which does not depend on said correction parameters).

Regarding Claim 31, Charbonnier in view of D'Amico and in further view of Barnett teaches all of the claimed limitations recited in Claim 3. Charbonnier in view of D'Amico and in further view of Barnett does not teach wherein the predetermined condition is that the measured strength of the communication from the at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the measured strength of the communication from the at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier in view of D'Amico as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claims 35 – 37, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein offset information as to how the measured strength of a communication from a neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claims 70 – 72, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said station has at least one common channel in the current cell (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 83 – 85, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station has at least one dedicated channel in the current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 96 – 98, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 111 – 113, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 127 – 129, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 144 – 146, Charbonnier in view of D'Amico in view of Barnett and in further view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

6. Claims 165 – 166 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charbonnier (5,241,686) in view of D'Amico et al. (5,127,100) in view of Barnett et

al. (5,509,051), as applied to Claim 1 above, and further in view of Jones et al. (US 6,192,245)

Regarding Claim 165, Charbonnier in view of D'Amico in view of Barnett teaches all of the claimed limitations recited in Claim 1. Charbonnier in view of D'Amico in view of Barnett does not teach wherein the predetermined time period is variable.

Jones, which also teaches a wireless system in which handoff is conducted, teaches wherein the predetermined time period is variable (Cols. 3 lines 58 – 67, 4 line 1, 6 lines 57 – 62, the timer can be variable).

It would have been obvious to modify the method of Charbonnier in view of D'Amico in view of Barnett with the handoff method of Jones for the purpose enabling a speed sensitive handover thus reducing interference as taught by Jones.

Regarding Claim 166, Charbonnier in view of D'Amico in view of Barnett teaches all of the claimed limitations recited in Claim 1. Charbonnier in view of D'Amico in view of Barnett does not teach wherein the variable predetermined time period is dependent on at least one of an environment and traffic.

Jones further teaches wherein the variable predetermined time period is dependent on at least one of an environment and traffic (Cols. 3 lines 58 – 67, 4 line 1, 6 lines 57 – 62).

It would have been obvious to modify the method of Charbonnier in view of D'Amico with the handoff method of Jones for the purpose enabling a speed sensitive handover thus reducing interference as taught by Jones.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **RAYMOND S. DEAN** whose telephone number is (571)272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond S Dean/
Examiner, Art Unit 2618
Raymond S. Dean
June 9, 2009